

DESCRIPTIONS OF NEW SPECIES OF AUSTRALIAN
COLEOPTERA. Part xv.

BY ARTHUR M. LEA, F.E.S.

SCARABAEIDAE.

RHOPAEA POLITA, n.sp.

♂ Of a bright pale castaneous and highly polished, elytra and antennal flabellum somewhat pale. Upper surface almost glabrous, sterna densely pilose.

Head moderately convex, and with moderately large, sharply defined punctures, becoming crowded at sides. Clypeus scarcely bilobed in front; punctures much as on rest of head, but sparse along middle. Antennae ten-, flabellum five-jointed; third joint cylindrical and fully twice as wide as long, fifth acute inwardly. Apical joint of maxillary palpi with a shallow, longitudinal depression. *Prothorax* apparently about twice as wide as long, sides strongly rounded and obtusely serrated; hind angles almost rectangular; median line short and vaguely impressed; punctures moderately large, but nowhere dense. *Scutellum* with rather numerous punctures. *Elytra* with vague geminate striae, enclosing four obtuse discal costae on each elytron; the interspaces with numerous fairly large punctures. *Pygidium* with dense, shallow, and mostly longitudinal punctures; its tip obtusely bilobed. Front *tibiae* strongly tridentate. Length, 19 mm.

Hab.—Queensland: Banana (E. Barnard), unique.

The upper surface is glabrous except for a few hairs between the eyes, and a dense fringe overlapping the base of the scutel-

lum; the elytra have marginal fringes, the pygidium has very sparse and short pubescence. The middle of the base of the head is impunctate; the whole of the upper-surface and the pygidium are very finely shagreened; the elytral punctures are of one kind only, instead of two, as in most species of the genus. If the character AAAA of Blackburn's table of the genus was without the expression "(only apical 3 of them full length)" this species could be referred to that group, but as it stands it cannot be so referred, as the five joints are of even length; of the species referred to that group, the sixth joint (first of the flabellum) in *R. morbillosa* and *R. planiceps* has an acutely pointed ramus, about half the length of that of the following joint; in *R. incognita* the first and second joints of the flabellum are both described as shorter than the third, and the clypeus was described as "alte reflexo," in the present species the upturn of the clypeus is much as in *R. planiceps*. At first glance it is much like *Pararhopaea callabonnensis*, but the labrum, antennae, etc., are very different.

MICRORHOPEA, n.g.

Head short; clypeus short, bilobed in front. *Eyes* large and very finely faceted. *Labrum* on the same plane as front face of clypeus, and considerably longer than it. *Labial palpi* short; *maxillary palpi* moderately long, apical joint as long as the two preceding ones combined. *Antennae* ten-jointed, the flabellum consisting of seven long rami. *Prothorax* short. *Scutellum* large. *Elytra* without regular striae; covering most of the pygidium. *Metasternum* elongate. *Legs* moderately long; front coxae widely transverse; femora moderately wide; front tibiae tridentate; tarsi long and thin, claws long, thin, and each with a small but acute basal appendix.

By Blackburn's table of the subtribes of Melolonthides* this genus must be referred to the true Melolonthides, and by his table of that subtribe† it would be associated with *Rhopaea*, several of whose species have the flabellum seven-jointed. The much smaller size and different appearance (although the head is short and bilobed as in *Pararhopaea* and *Lepidiota*) of the only known species, indicate that the genus is distinct from *Rhopaea*, but almost the only apparently valid distinction is in

*Trans. Roy. Soc. S. Aust., 1905, p.276.

†L. c., 1911, p.187.

the claws; each of these has a very small and acute tooth near the base and at the extreme base a gentle swelling; in *Rhopaea* the tooth is considerably larger and more distant from the base. At first glance it has the appearance as of being allied to *Liparetrus* and *Comophorus*. The spurs to the hind tibiae are acute and almost evenly decrease in width from the base to the apex.

MICRORHOPAEA FLAVIPENNIS, n.sp.

♂ Black; elytra and antennae flavous, basal joint of the latter darker, palpi and tarsi of a more or less dingy red. Elytra with sparse, short, depressed, white setae; rest of upper surface, under surface and legs with rather dense, long, white hair.

Head (including clypeus) with coarse, crowded punctures. Antennae with basal joint slightly longer than two following combined, second narrow at base and suddenly dilated at apex; rami of the flabellum of equal length and slightly longer than clypeus is wide. *Prothorax* about twice as wide as long, front angles almost completely rounded off, hind ones obtuse; with large and coarse punctures, but leaving an impunctate median line on basal half. *Scutellum* with coarse punctures at base, apex shining and impunctate. *Elytra* with sides gently rounded, each obliquely truncate at apex; without striae except one with coarse punctures on each side of suture; punctures rather large, but not so crowded (although in places confluent) as on prothorax. *Pygidium* with dense, more or less concealed punctures. Apical tooth of front *tibiae* long and acute, second acutely triangular, third small. Length, 9.5 mm.

Hab.—Northern Territory: Darwin (N. Davies).

The colour, clothing, and beautiful fan-like antennae render this species an extremely distinct one; it is the smallest Australian member of its subtribe.

ENGYOPS CASTANEUS, n.sp.

Bright reddish-castaneous. A fringe of long hairs on each side of prothorax and elytra, rest of upper surface glabrous; pygidium with a conspicuous fringe; under surface and legs sparsely and irregularly clothed.

Head with sparse and rather small punctures between eyes. Clypeus semicircular, margins moderately upturned, and near base suddenly deflected outwards, hind suture curved to middle;

punctures denser and coarser than between eyes. Antennae nine-, club three-jointed, rami almost the length of front tibiae. *Prothorax* about twice as wide as long, sides evenly rounded, apex and base gently bisinuate; front angles gently rounded off, hind ones more strongly; with rather sparse punctures, much as on head between eyes. *Elytra* feebly dilated to beyond the middle, with rows of fairly large punctures in feeble striae, or the striae deep and their punctures small, even interstices wider than the others, and with fairly numerous punctures, the odd interstices with smaller and sparser punctures. *Pygidium* with rather sparse punctures, but denser in angles. Front *tibiae* tridentate, the two first teeth large and fairly close together, the third small, but acute, and slightly nearer the base than the second; basal joint of hind tarsi slightly longer than the second. Length. 12.5—13 mm.

Hab.—Queensland: Coen River (H. Hacker).

Much larger and wider than *E. spectans*, and with the third tooth of the front tibiae more distant from the second than in that species; from *E. flavus* it also differs in being considerably larger and darker, clypeus longer, etc.; the mentum more nearly approaches that of *spectans* than that of *flavus*.

TELURA SUTURALIS, n.sp.

Flavous, suture infuscated almost to apex. Upper surface glabrous except for two hairs on each side of clypeal suture and a few at sides of prothorax and of elytra; three segments of abdomen each with a transverse row of long stiff hairs, a few similar hairs on metasternum and legs.

Head rather convex and with sparse and minute punctures, becoming larger and denser at sides and in front. Clypeus more than thrice as wide as long, margins moderately upturned, front very gently incurved to middle (almost straight); punctures larger and denser than elsewhere on head. Antennae nine-, club three-jointed, rami slightly longer than inner apical spur of front tibiae. *Prothorax* not twice as wide as long, sides evenly rounded, front angles produced and acute, hind ones rounded off but almost rectangular; punctures sparser and slightly smaller than on clypeus. Apex of *scutellum* impunctate. *Elytra* long, thin and almost parallel-sided; striae well-defined, but becoming faint posteriorly, punctures irregularly placed in them, and often partly on interstices, the latter with

rather sparse punctures. *Pygidium* with minute punctures. *Legs* long and thin; front tibiae tridentate, apical tooth long and acute, second acute but much smaller, third very small and ill-defined. Length, 9-10 mm.

Hab.—Western Australia: Mullewa (Miss J. F. May).

A long narrow species, nearer to *T. clypealis* than to *T. vitticollis*, but front tibiae with the third tooth very feeble, and clypeus gently incurved to middle (in shape it is intermediate between that of the two other species). The club is three-jointed on the two specimens before me, possibly indicating that they are females.

PHYLLOTOCUS FUGITIVUS, n.sp.

♂ Black, front legs and claws more or less reddish. Prothorax and elytra fringed with thin setae, similar, but more numerous setae on under-surface and legs.

Head with dense and comparatively coarse, crowded punctures. Clypeus distinctly shorter than an eye, its sides lightly upturned; labrum about half the length of clypeus, its front edge gently upcurved, truncated in middle, the angles widely rounded off. Antennae eight-, club three-jointed, lamellae each as long as the five basal joints combined. *Prothorax* about once and two-thirds as wide as long, sides moderately rounded, apex evenly incurved, with the front angles acute but not separately produced, hind ones rounded off; punctures sparser, especially in middle, and smaller than on head. *Elytra* punctate-striate, the sutural stria on each suddenly deflected so as almost to touch the suture at the summit of the apical slope. Sides of hind *coxae* scarcely longer than metasternum, and each with rather crowded punctures; hind femora stout; front tibiae tridentate; front claws unequal, the larger one more strongly curved than the other, and with a large basal appendix. Length, 5.5-6 mm.

Hab.—New South Wales: Richmond River (W. W. Froggatt).

Structurally close to the following species, but with the hind femora edentate; it is also allied to *P. cribriceps*, but is larger and the prothorax appears to be opaque from most directions, although slightly iridescent from others; the elytra also are conspicuously iridescent from some directions, and opaque from others; but on *P. cribriceps* the upper surface from all points

of view appears polished and iridescent; the fifth joint of the antennae is larger, although small, and the fourth is shorter than on that species. From directions in which the prothorax appears opaque its punctures have a dust-like appearance, but from other directions they are distinct; the apparent depths of the elytral striae also vary with the point of view, and their contained punctures to an even more noticeable extent. The punctures on the labrum are almost as large as the interocular ones.

Var. A. Another specimen from the Richmond River differs in being smaller (5.25 mm.), and with the elytra reddish-flavous, except that the suture is infuscated, and that the sides are black, narrowly at the base, and becoming wider posteriorly, so that the whole apex is black.

PHYLLOTOCUS TRUNCATIDENS, n.sp.

♂ Black; elytra flavous, the suture and sides infuscated or black, front legs mostly flavous. Prothorax and elytra fringed with whitish hairs, similar hairs on head and fairly numerous on under surface and legs.

Head with dense and well-defined punctures, becoming crowded and larger towards clypeus. Clypeus about one-fourth as long as its basal width, sides gently upturned, its hind suture somewhat uneven but fairly distinct; the front one well-defined; labrum in middle not much shorter than clypeus, its apex slightly and evenly curved, and moderately uplifted. Antennae eight-, club three-jointed, each lamella almost as long as the five basal joints combined. *Prothorax* about once and two-thirds as wide as long, sides moderately rounded, front angles produced and acute, hind ones widely rounded off; punctures smaller and much sparser than on head. *Elytra* with distinct striae containing fairly large punctures; interstices gently convex, somewhat wider near suture than elsewhere. *Metasternum* with a small conical tubercle at the middle of its extreme apex. Sides of hind *coxae* not as long as metasternum; hind femora stout and with a large truncated tooth; front tibiae and claws as described in preceding species. Length, 6 mm.

Hab.—New South Wales: Comboyne (W. H. Muldoon), unique.

A comparatively compact species, like a robust *P. luridus*, but the prothorax is somewhat shorter and opaque (from some

directions, however, parts of it appear to be slightly iridescent), and the tooth or flange on each hind femur is larger and truncated; there is also a curious little tubercle on the metasternum that does not occur on *luridus*. From behind the elytra appear opaque, with the striae and their contained punctures much smaller than they really are.

PHYLLOTOCUS OBSCURUS, n.sp.

♂ Dark brown, two obscurely defined elytral vittae and parts of under surface and of legs paler. Prothorax and elytra fringed with whitish hairs, similar ones on under surface and legs.

Head flattened in front and with small, sharply defined punctures, becoming crowded on clypeus. Clypeus more than five times as wide as long, hind suture somewhat irregular, front and side margins gently upturned; apex of labrum slightly more upturned than apex of clypeus. Antennae eight-, club three-jointed, lamellae almost as long as the five basal joints combined. *Prothorax* about one-fourth wider than long, basal half parallel-sided, front angles produced and acute, the hind ones rounded off; punctures distinct but sparser and smaller than on head between eyes. *Elytra* comparatively short, with fairly deep striae containing large punctures; interstices gently convex, those near the suture wider than the others, all with small punctures. Sides of hind *coxae* slightly shorter than metasternum; hind femora stout and unarmed; front tibiae with two strong teeth, and a third vaguely indicated; front claws unequal. Length, 6 mm.

♀ Differs in being slightly smaller, prothorax more transverse, abdomen larger, lamellae of antennae slightly shorter, front tibiae with the third tooth small but distinct, and front claws simple.

Hab.—New South Wales: Galston (A. M. Lea).

The types, one of each sex, in general appearance are like dark specimens of *P. antennalis*, but the antennae have one less joint, the third and fourth joints are very differently proportioned, and the club is composed of but three lamellae. The larger front claw of the male has a large sharply triangular appendix, so placed that from certain directions the claw appears strongly bifid; the middle tarsi are missing from the type male, but as the front ones are without long quill-like appendages the

species evidently does not belong to *Phyllotocidium*. Viewed at right angles the labrum is seen to be of exactly the same length as the clypeus, although not so wide, but from behind it appears to be much shorter. The elytral vittae of the male are of a rather dingy flavous and distinct to the naked eye, but are not sharply limited; they extend from the base to near the apex in slightly oblique directions, covering from three to five interstices; on the female they are scarcely indicated; on both, the middle of the metasternum (narrowly in front, widely behind) is somewhat flavous, but the paler parts of the legs are very obscure.

PHYLLOTOCUS BILOBUS, n.sp.

Dark brown; head and prothorax almost black, elytra obscure reddish-brown, the suture and sides slightly darker. Prothorax and elytra fringed with whitish setae, similar setae on under-surface and legs.

Head flat, and with small, dense, asperate punctures. Clypeus at base more than four times as wide as the median length, base bisinuate, apex very feebly incurved and slightly upturned, sides somewhat sinuous; punctures slightly coarser than between eyes; labrum moderately upturned in front, and slightly but distinctly bilobed. Antennae eight-, club three-jointed. *Prothorax* about once and one half as wide as long, basal two-thirds parallel-sided, base gently and widely rounded in middle, front angles produced and acute, the hind ones rectangular; punctures not very dense and small but sharply defined, a few larger ones margining apex and a few on disc. *Elytra* parallel-sided to beyond the middle; striae well-defined but irregular and not very deep, their contained punctures mostly ill-defined. *Abdomen* small and curved to tip. Sides of hind *coxae* at least one-fourth longer than metasternum; front tibiae with two strong teeth and a small obtuse one; all claws simple, the front ones shorter than the others. Length, 4.5 mm.

Hab.—New South Wales: Sydney.

The type is structurally very close to *P. antennalis* and *P. obscurus*; at first glance it looks like a small specimen of one of the dingy forms of *P. moestus*, but the clypeus and labrum are very different to these parts in that species, and there are many other differences of the body and appendages. From the side each hind angle of the prothorax is seen to be a right

angle, not at all rounded off, but from above it appears to be somewhat acute, and to feebly embrace the shoulder; the punctures on the head (including the clypeus) are small, and so crowded together that the surface might fairly be regarded as shagreened. From some directions parts of the upper surface appear to be vaguely iridescent. There are long hairs set in the large discal punctures of the pronotum, and a few on the elytra. The front claws are equal, and this is usually a feminine character in the genus; but the abdomen is small and slightly curved to the tip, and this, in conjunction with the second specimen, now to be noted, convinces me that it is a male.

A specimen which is probably a female of the species differs from the type in being larger, entirely pale (except for the club) and with the abdomen much larger and convex in the middle; the structure of its head (including some unusual features of the clypeus and labrum), and the base of its prothorax are exactly the same, it has also a few hairs on the prothorax and elytra.

SAULOSTOMUS BRUNNEOVIRIDIS, n.sp.

Dark brown with a conspicuous metallic-green gloss. Clothed with long, white hairs, front femora with a row of reddish bristles in front, and similar bristles at base of under surface of head.

Head with dense, asperate punctures, becoming well-defined about base. Clypeus thrice as wide as long, front angles rounded (off, front margin rather strongly' upturned and straight, sides feebly upturned and almost parallel; punctures similar to those on rest of head. Antennae ten-, club three-jointed; club about as long as width of head at base, one side straight, the other gently curved. *Prothorax* about once and one-half as wide as long, front angles produced and subacute, hind ones obtuse, sides rather strongly and evenly rounded, base lightly bisinuate; with rather large but shallow, unevenly distributed punctures, and with numerous minute ones. *Scutellum* with apical half impunctate. *Elytra* not much wider than prothorax, not much longer than wide, apex conjointly rounded (almost truncate), each with two obtuse discal elevations; with rather large punctures, dense in places, and frequently transversely confluent. *Pygidium* with rather dense,

but small and shallow, partially concealed punctures. Front *tibiae* rather strongly tridentate; basal joint of front tarsi (as seen from below) distinctly longer than second. Length, 14 mm.

Hab.—New South Wales: Hunter River (Macleay Museum).

Structurally close to *S. villosus*, but very differently coloured, and the clypeus and antennae different. The head and middle of prothorax are of a darker green than elsewhere, the antennae and palpi are dark-brown and glossy, but not metallic, parts of the under surface and of the legs are of a rather bright castaneous, with the greenish gloss less conspicuous than on their darker parts. The long hairs on the elytra are numerous and evenly distributed but not dense; on the scutellum they are dense about the base, but absent from the apex; on the sides of the prothorax they are as on the elytra, but the middle (possibly from abrasion) is glabrous; on the head they are sparse; the pygidium is more densely clothed than the elytra, and in addition has a fringe of longer hairs; on the under surface and parts of the legs the clothing is longer and sparser than on the upper surface. The second tooth of the front *tibiae* is much nearer the first than the third. The sex of the type is doubtful; on the right front tarsus the larger claw is cleft at the apex (a feminine character), but on the left tarsus both claws are simple; the club of the antennae is large, but it is large on the females of other species, although smaller than on their males; the punctures on the head are more crowded than is usual on males of the genus.

AMBLYTERUS TARSALIS, n.sp.

Dark castaneous-brown; head (except clypeus) and prothorax with a metallic bluish or coppery-green gloss, some marginal parts and the tibial teeth black. Abdomen (including pygidium) with rather dense, depressed, silvery hairs, mixed with longer ones, mesosternum densely clothed with long white hairs.

Head with rather large and crowded, but sharply defined punctures. Clypeus about thrice as wide as its median length, sides strongly narrowed from near base, apex strongly upturned, with its outer angles widely rounded off; punctures even more crowded and less defined than on rest of head. Antennae ten-, club three-jointed; club slightly longer than distance between eyes. *Prothorax* about once and one-fourth as wide as

long, sides almost parallel from base to apical two-fifths, and then strongly narrowed to apex, front angles lightly produced and rather widely rounded off, a narrow impressed line close to each margin; punctures moderately dense, and sharply defined but not very large. *Scutellum* with fairly dense punctures on each side of base. *Elytra* slightly wider than prothorax; with irregular punctures and striae. *Pygidium* with very dense, but more or less concealed, punctures. Front *tibiae* strongly tridentate; front tarsi with three basal joints densely padded on under surface, first joint distinctly longer than second, larger claw cleft on all tarsi. Length, 18-19 mm.

Hab.—Queensland: Dalby (Mrs. F. H. Hobler).

As the labrum is not as in *Anoplognathus*, and its immediate allies, and the larger claw on each tarsus is cleft, this species by the table given by Ohaus* could only be referred to *Amblyterus*, or to a new genus; the lower lip is somewhat pointed, in this respect differing from *A. cicatricosus* and *A. clypealis*, and this, with the distinctive pads on the front tarsi may eventually be considered as of generic importance. The general appearance of the species is strikingly like that of larger specimens of *cicatricosus*, and the size is well within its range, but the clypeus is very different from that of each sex of that species, the hind claw-joint is very different, having a projection near the base that causes the tarsi to appear as if six-jointed; on the middle claw-joint there is a remnant of the projection, but not on the front one. There is not a trace of the projection on *cicatricosus* or *clypealis*, but there is on the species of *Schizognathus* and *Paraschizognathus*. On the type the metallic gloss of the upper surface is but slight, and is distinctly purplish-blue; on a second specimen it is of a bright coppery-green, and is vaguely extended on to the sutural portion of the elytra. The upper surface is glabrous, except for a marginal fringe on each elytron, and for a few white hairs on the ocular canthi. The prothorax has but vague remnants of a median line. Some of the elytral striae are deep and well defined, with small punctures, and with a subgeminat arrangement, but others are irregular and with larger ring punctures, so that they appear as little more than irregular rows of punctures; near the scutellum the punctures are larger than elsewhere, and the sur-

*Stett. Ent. Zeit., 1904, p.66

face is more or less wrinkled, the sides near the shoulders are also wrinkled, some of the interstices have a few large punctures. The clypeus seems to indicate that the specimens described are females, but the clothing of the front tarsi can scarcely be other than a masculine feature.

CRYPTODUS ATER, n.sp

Black, highly polished; parts of antennae and of palpi obscurely reddish.

Head with crowded, reticulate punctures, becoming isolated, but still dense, in middle of base; with a shallow median depression, on each side of which is a feeble elevation. Clypeus gently rounded, outer margins upturned throughout, but less on sides than in front. Mentum gently incurved at base; with dense, reticulate punctures there, becoming smaller and sparser in front. Antennae ten-jointed, first joint strongly and evenly dilated at apex. *Prothorax* with sharply defined but not very large or dense punctures, becoming smaller, crowded, and transverse on frontal, and latero-frontal margins; median line lightly impressed. *Elytra* with numerous series of elliptic punctures, each separated from the adjacent surface by a fine ring, punctures on the interspaces few and small. *Pygidium* with reticulate sculpture; at apex with fairly dense but isolated punctures. *Front tibiae* rather strongly tridentate. Length, 22-24 mm.

Hab.—New South Wales: Jenolan (J. C. Wibur), Sydney (A. M. Lea).

In general appearance close to *C. tasmanianus*, and with similar reticulation of the pygidium, but the base of the mentum is distinctly notched, although much less deeply than on most species of the genus. From the description and figure of *C. politus* it differs in being smaller, head with crowded punctures, punctures of under surface not "tenuissime" and elytral costae much less conspicuous (even less so than *tasmanianus*), the shape, but not the punctures, of the mentum is much as that of Westwood's figure (4 b); *C. debilis* is described as having the base of the mentum truncate, the antennae nine-jointed and the size much less. The elevations on the head are so feeble that they could scarcely be regarded as tubercles. The punctures on the under-surface vary considerably, in places being rather small and isolated, elsewhere small and each in the centre of a circle, these having a reticulate appearance, whilst elsewhere the circles

are reduced to segments and isolated, but each with a small puncture; on one specimen the punctures in the median line of the pronotum are larger and more transverse than the adjacent ones, but on the other specimen they are no different. As the front tarsi are simple they are probably both females; but this is not necessarily the case as the males of *C. paradoxus* and of at least two other species, the sex of which I have proved by dissection, have simple front tarsi.

CRYPTODUS CONCENTRICUS, n.sp.

♂ Black, highly polished, parts of antennae obscurely dilated with red.

Head with crowded, reticulate punctures; a wide depression in middle. Clypeus with margin strongly upturned in front, less so on sides. Mentum with base deeply notched or bidentate, with crowded reticulate punctures, becoming smaller and more isolated in front. Antennae ten-jointed, first joint strongly dilated at apex. *Prothorax* with sharply defined but rather small and not very dense punctures, becoming crowded and transverse on frontal and latero-frontal margins; median line distinct, becoming rather deep and wide in front. *Elytra* with series of fairly large, elliptic, or round, ringed punctures, the interspaces with small and sparse punctures. *Pygidium* with dense, concentric scratches, and numerous small punctures. Intercostal process of *prosternum* with a transverse carina, its ends nodose. Front *tibiae* strongly tridentate; front claws uneven. Length, 21-22 mm.

Hab.—New South Wales: Albury (W. Dumbrell and A. M. Lea).

A highly polished species, but smaller and differing in many other respects from the description of *C. politus*; the conspicuously foveate head, and concentric sculpture of the pygidium (as on many *Cetonides*) readily distinguishes it from all other species known to me. The excavation on the head occupies the median third in width, and about three-fourths the length; on each side of it there is an obtuse swelling that could hardly be called a tubercle; the scratches on the pygidium are not parts of a system of circles, each with a central pit (as on many species of the genus) but are more or less concentric, wavy lines, isolating numerous thin elevations, each of which on an average has from three to five punctures; on the under surface, especial-

ly on the sides of the sterna, the scratches are deeper, on the abdomen they are mostly transverse; the elytral costae are fairly distinct, but not sharply defined. One of the front claws is much the same as those of the other legs, but the larger one is thicker, more strongly curved, and with a wide basal appendix, from some directions it appears to have a basal tooth (as in the figure of *politus*), but it really has a wide flange-like appendix there, which, viewed from the sides, gives the appearance as of a tooth.

CRYPTODUS QUADRIDENTATUS, n.sp.

Black, highly polished; parts of antennae obscurely dilated with red.

Head with crowded, coarse, reticulate sculpture; with a shallow median depression, on each side of which is a feeble elevation. Clypeus with margins rather lightly upturned, the front feebly or not at all incurved to middle. Mentum deeply notched and tridentate at base; with crowded, reticulate sculpture, becoming less confused in front. Antennae ten-jointed, basal joint dilated at apex, more conspicuously on one side than another. *Prothorax* with fairly large, and moderately dense, shallow punctures, each with a central pit, becoming more crowded on the sides in front; median line lightly impressed. *Elytra* with rows of rather large, elliptic, ringed punctures, becoming small and more rounded towards sides, interstices with fairly numerous and rather small but sharply defined punctures; costae well defined. *Pygidium* obliquely flattened, with dense, reticulate sculpture, but at apex with simple punctures. Front *tibiae* with four teeth, the sub-basal one small, the others large. Length, 22-23 mm.

Hab.—Queensland: Dalby (Mrs. F. H. Hobler), Cunnamulla (H. Hardcastle).

With the quadridentate front tibiae of *C. foveatus*, and with very similar elytral sculpture, but the pygidium nonfoveate. The reticulation of the head is continued even on to the elypeal margins. The front tarsi of both specimens are simple.

MELANDRYIDAE.

SCRAPTIA POROSA, n.sp.

Of a rather dingy flavo-testaceous. Rather densely clothed with short, pale pubescence.

Head with crowded subasperate punctures of moderate size. Eyes moderately separated in male, more widely in female, deeply notched. Antennae thin, second and third joints very small, third slightly the smaller. *Prothorax* at base about thrice as wide as the median length, sides feebly decreasing in width from base to middle and then strongly to apex; with crowded and well-defined punctures of moderate size. *Elytra* parallel-sided to beyond the middle; with dense and fairly large punctures, in places subconfluent, becoming somewhat smaller and less crowded posteriorly. Spurs to hind *tibiae* rather short and unequal. Length, 3-3½ mm.

Hab.—New South Wales: Wollongong, National Park (A. M. Lea).

Structurally closer to *S. lunulata* than to any other described species, but elytra immaculate, etc. In the male the antennae are longer and stouter than in the female, and the eyes are but little more than half the distance apart. There are no distinct markings on the elytra, but on one of the two females before me there are some very feeble infuscations; on the only male most of the abdomen is dark; the legs are paler than the other parts. The punctures on the head are somewhat transversely arranged towards the base.

SCRAPTIA OCULARIS, n.sp.

Of a rather dingy flavous. With very short and moderately dense whitish pubescence.

Head with crowded but rather small punctures, and with a feeble median line. Eyes rather widely separated, deeply notched. Antennae thin, second joint slightly larger than third, both very small, their combined length about equal to that of fourth. *Prothorax* about twice as wide as the median length, sides almost parallel on basal half, and then strongly narrowed to apex, with a rather conspicuous median channel and a distinct depression on each side; with crowded and rather small subasperate punctures. *Elytra* parallel-sided almost throughout; with crowded and rather coarse punctures, becoming smaller posteriorly. *Legs* moderately long, spurs to hind *tibiae* short and subequal, about the length of the second tarsal joint. Length, 3½-4 mm.

Hab.—Tasmania: Mount Wellington, Waratah (A. M. Lea).

Readily distinguished from the other Tasmanian species by

its much coarser elytral punctures, the derm also appears to be of harder texture than usual. Of the three specimens under examination two are uniformly flavous, except that the appendages are slightly paler than the body parts; but the third is slightly darker, and vaguely infuscated along the suture. They are apparently all of one sex, probably female as the eyes are separated more than the length of the first joint of antennae; the notch in each eye is rather wider than deep; the outer portion of each is subtriangular in shape, and considerably larger than the inner portion.

SCRAPTIA FUMATA, n.sp.

♂ Of a dingy testaceous brown. Densely clothed with extremely short, pale pubescence.

Head with crowded and small indistinct punctures. Eyes large, almost touching in front, with a deep almost U-shaped notch. Antennae long and moderately thin, passing elytra for a short distance, second joint slightly smaller than third, their combined length distinctly less than that of fourth, fourth and fifth subequal. *Prothorax* not twice as wide as the median length, sides parallel on basal half, then obliquely strongly narrowed to apex; with very dense and minute punctures. *Elytra* at base slightly wider than prothorax, and with slightly smaller punctures. *Legs* long and thin; spurs to hind tibiae very unequal, the longer slightly shorter than the claw joint, the shorter traceable with difficulty. Length (♂, ♀) $4\frac{1}{4}$ - $5\frac{3}{4}$ mm.

♀ Differs from the male in being somewhat wider, eyes smaller and more widely separated (at their nearest point they are distant about the length of the first joint of antennae), antennae decidedly thinner and shorter, and front tarsi less dilated.

Hab.—Western Australia: Mullewa, Lennonville (Miss J. F. May).

The under surface is usually darker than the upper, the two females before me are paler than the six males, but even they have a dingy, smoky appearance. There are three depressions on the pronotum of all the specimens, but they are usually very vague, and appear to be due to slight contractions; the elytra and abdomen are rather badly shrivelled on most of them, and even the legs are sometimes shrivelled.

SCRAPTIA MICROSCOPICA, n.sp.

Blackish, appendages not much paler. Rather densely clothed with short, dingy pubescence.

Head with crowded and rather small punctures. Eyes widely separated, rather deeply notched. Antennae moderately long and thin, second joint small, slightly larger than third, the latter indistinctly separated from fourth. *Prothorax* about thrice as wide as the median length, sides feebly rounded towards base, but strongly towards apex; punctures much as on head. *Elytra* at base the width of prothorax, sides feebly dilated to beyond the middle, and then feebly narrowed to apex; punctures slightly sparser and better defined than on pronotum, but of similar size. Spurs to hind *tibiae* very unequal, the longer about the length of second tarsal joint. Length, 1 $\frac{3}{4}$ -2 mm.

Hab.—Western Australia: Geraldton.—Tasmania: Huon River (A. M. Lea).

A very small dark species, at first glance suggestive of some of the small species of *Dasytes* of the *Malacodermidae*. The notches in the eyes are rather deep, but owing to the black colour of the head they are distinct only on close examination.

A specimen from New South Wales (National Park) appears to belong to the species, but is not in condition for confident identification.

TEMNOPALPUS TRICOLOR, n.sp.

Black, elytra deep purplish-blue, prothorax reddish flavous, tarsi somewhat paler. Sparsely clothed with rather short blackish hairs, becoming shorter and somewhat denser on under-surface.

Head with fairly dense and rather coarse punctures. Eyes very prominent. Antennae passing scutellum, first joint moderately stout, almost as long as second and third combined, third slightly shorter than second or fourth, first to sixth shining, the others subopaque and slightly wider. *Prothorax* transverse, sides strongly rounded, base narrower than apex, with a shallow depression towards each side of base; punctures the size of those on head, but much sparser. *Elytra* distinctly wider than prothorax, almost parallel-sided throughout; punctures slightly larger than on prothorax, and midway in density

between those on prothorax and on head, but becoming much smaller posteriorly. Length, $4\frac{3}{4}$ mm.

Hab.—Tasmania: Waratah, unique (A. M. Lea).

Structurally close to *T. bicolor*, but elytra of a deep purplish-blue, and legs with only the tarsi conspicuously pale.

TEMNOPALPUS NIGER, n.sp.

Black, tarsi flavous, knees obscurely dilated with red. Rather sparsely clothed with straggling blackish pubescence, or short hairs. Length, 5 mm.

Hab.—King Island, unique (A. M. Lea).

Structurally close to the preceding species, but very differently coloured, elytral clothing somewhat denser, punctures denser (more noticeably so on the prothorax than elsewhere), head rather more convex, antennae slightly longer, with the seven basal joints shining and only the three apical joints slightly wider than the preceding ones, and pronotum with the depressions more distant from the base. On the types of both species the elytra do not quite cover the abdomen.

TRICHOSALPINGUS LONGICOLLIS, n.sp.

Of a dingy reddish-brown, some parts paler. Closely covered with short ashen pubescence.

Head lightly convex, with a vague longitudinal depression near each eye, clypeal suture semicircular and well-defined; eyes fairly large, lateral and prominent. Antennae scarcely passing scutellum, second joint shorter than third but somewhat stouter. *Prothorax* slightly longer than wide, sides almost parallel, base and apex truncate, with an oblique impression on each side of base opening out into a very shallow submedian impression. *Elytra* much wider than prothorax, parallel-sided for a short distance, and then dilated to near apex. Length, $4\frac{1}{4}$ – $4\frac{1}{2}$ mm.

Hab.—New South Wales: Mount Kosciuszko, 5700–6000 feet (R. Helms).

The prothorax is longer in proportion than that of any other described species, and in actual size the species is only exceeded by *T. lateralis*. On the type, the suture and two large suboval spots on each elytron (the first at the basal third, the second at the apical third) the tarsi and knees are obscurely flavous or testa-

ceous; on a second specimen the elytral spots are very vaguely indicated, and the tarsi are no paler than the tibiae. The punctures on the upper surface are very dense and small, but well-defined; they are slightly denser in the pronotal depressions and somewhat smaller towards apex than elsewhere. In some lights there appear to be vague remnants of elytral striation.

TRICHOSALPINGUS LATICOLLIS, n.sp.

Of a dingy piceous-brown, legs paler, tarsi almost flavous. Clothed with very short, ashen pubescence.

Head wide and rather flat, without distinct longitudinal impressions. Eyes large and lateral. Antennae scarcely passing scutellum, second joint stouter than third and very little shorter. *Prothorax* distinctly wider than long, sides gently rounded and increasing in width from base to near apex, with a shallow oblique depression on each side of base. *Elytra* much wider than prothorax, sides distinctly dilated from base to beyond the middle, and then widely rounded. Length, $3\frac{1}{2}$ - $3\frac{3}{4}$ mm.

Hab.—New South Wales: National Park (A. M. Lea).

Wider than *T. brunneus*, prothorax notably more transverse, and with impressions much reduced in size and depth. On the type, in addition to the basal depressions, there is a feeble depression on each side; on a second specimen there are no traces of these, but there is a vague sublateral-apical depression on each side of the disc. The punctures on the upper surface are dense, fine and rather sharply defined, but they become shallower and smaller towards apex of elytra.

TRICHOSALPINGUS NIGER, n.sp.

Black, parts of legs and of palpi obscurely paler. Closely covered with very short whitish pubescence.

Head lightly convex, clypeal suture semicircular. Eyes large, lateral and prominent. Antennae slightly passing base of prothorax, second joint stouter and slightly shorter than third, eleventh almost as long as first. *Prothorax* slightly longer than wide, sides feebly increasing in width from base to near apex, and then decreasing to apex, which is a trifle wider than base; each side with a conspicuous, semicircular impression. *Elytra* much wider than prothorax at base, sides

gently increasing from shoulders to about the basal third, and then more noticeably dilated. Length, 4 mm.

Hab.—Tasmania: Mole Creek, Mount Wellington (A. M. Lea).

The black colour, together with the conspicuous latero-basal impressions of the prothorax, render this species very distinct. The greatest width of the elytra is at the apical fourth, where the width is about thrice that of the prothorax; the punctures on the head and elytra are dense and small, but sharply defined, on the prothorax they are denser and subgranulate in appearance.

ORCHESIA EUCALYPTI, n. sp.

Black or blackish brown, elytra with flavous zigzag markings, antennae and legs, and usually most of the under surface, of a dingy castaneous. Clothed with extremely short pubescence.

Head almost concealed from above, with small, dense punctures. Antennae thin, four apical joints slightly thickened. *Prothorax* about once and one-half as wide as the median length, sides strongly rounded and much wider at base than at apex, with a shallow depression towards each side near base; with small dense punctures; marginal carina on each side short and basal. *Elytra* at base the width of prothorax, sides feebly dilated to near the middle, and then rather more strongly diminishing in width to apex; punctures much as on pronotum. *Under surface* strongly ridged along middle. Hind spurs slightly longer than their supporting *tibiae*, and almost as long as the following joint. Length, $2\frac{1}{2}$ – $3\frac{3}{4}$ mm.

Hab.—Tasmania: Summit of Mount Wellington, numerous specimens beaten from *Eucalyptus cocciferus* trees (A. M. Lea).

Structurally fairly close to *O. austrina*, but narrower at both ends, and elytra with conspicuous markings. The under surface is sometimes entirely blackish, and on such specimens parts of the legs are usually deeply infuscated. The elytral markings vary somewhat in extent and completeness, but not in disposition, and consist of an antemedian zigzag fascia and a postmedian one; the first (when complete) commences on each side at the basal third, and crosses the suture also at the basal third; the second (on many specimens appearing as three disconnected spots obliquely placed on each elytron) commences on each

side at about the apical fourth, and crosses the suture just beyond the middle. One small specimen (possibly immature) is of a rather dull red, with the part between the zigzag fasciae (these unusually pale) almost black, so that the elytra are tricolourous.

ORCHESIA BRYOPHILA, n.sp.

Flavous or fusco-flavous, under surface more or less infuscated, pronotum with an infusate (usually semi-double) discal blotch; elytra with three infusate zigzag fasciae. Clothed with extremely short pubescence. Length, 3-4 mm.

Hab.—Tasmania: Mount Wellington. Hobart, in moss (A. M. Lea).

Structurally very close to the preceding species, but elytra with dark markings on a pale background, instead of *vice versa*. Four specimens were obtained from moss on three occasions. The head is more or less deeply infuscated, on one specimen being almost black. Of the elytral fasciae the first is sub-basal and touches the sides at the apical fourth, it has several dark extensions towards the base, so that it appears to mark off from six to ten longitudinal flavous spots; the second is submedian and, commencing from the suture, extends obliquely forwards, then backwards, and from about the middle of the backward part there is a short spur connected with a suddenly and widely dilated lateral portion; the third fascia is at about the apical fourth, is less sharply defined than the others, and from the suture has a backward trend; between it and the median fascia, on some specimens, the flavous portion appears as six elongate, partially disconnected spots; the suture is pale, except close to the base. From some directions the elytra appear to be rather conspicuously striated, but there are no true striae, although there is a shallow longitudinal depression on each side of the suture.

ORCHESIA MEDIOFLAVA, n.sp.

Dark piceous-brown, tip of prothorax, muzzle, antennae (base paler), legs and parts of under surface of a rather dingy castaneous, palpi and median portion of elytra flavous. Clothed with extremely short pubescence. Length, 4½ mm.

Hab.—Tasmania: Mount Wellington, unique (A. M. Lea).

Structurally very close to the two preceding species, but

somewhat thinner, antennae thinner and depressions on pronotum slightly larger and with a third one in middle. The elytral markings are also very different; their flavous portion (which is not of an uniform shade throughout, but in places has slight infusate stains) occupies about one-half of the surface; towards the base on each elytron it is encroached upon by three extensions of the dark portion, two of which are acutely triangular; towards the apex it is also encroached upon by two acutely triangular dark extensions; the suture is obscurely pale almost to the base.

ORCHESIA PICTIPENNIS, n.sp.

Castaneous; pronotum black, parts of under surface infuscated, elytra with flavous and infusate markings. Densely clothed with short pubescence.

Head with rather small but clearly defined punctures. Antennae rather short, apical joints clavate. *Prothorax* about once and one half as wide as long, sides strongly rounded, base truncate and much wider than apex; punctures as on head, marginal carina on each side curved and continuous throughout. *Elytra* at base the width of prothorax, sides feebly dilated to basal fourth, and then narrowed to apex, punctures as on prothorax. *Under-surface* strongly ridged along middle. Hind spurs distinctly longer than their supporting *tibiae*, and as long as the following joint. Length, $3\frac{1}{2}$ - $3\frac{3}{4}$ mm.

Hab.—Tasmania: Mount Wellington, two specimens from moss, Latrobe, one from flood debris (A. M. Lea).

The pale elytral markings may be regarded as two zigzag fasciae; of these the first is partly before and partly on the middle, and consists of six irregular spots irregularly conjoined; the second is at about the apical third on the suture, and on the apical fourth at the sides; they are rendered very conspicuous by the derm adjacent to them being deeply infuscated (almost black). The specimen from Latrobe has much less conspicuous markings than the others; on it the elytra slightly beyond the middle have an infusate fascia, with the derm before and after it considerably paler, but not flavous, although the flavous markings of the type may be made out in a blurred fashion. The elytra from some directions appear to be distinctly striated, but true striae (except for a vague subsutural one on each elytron) are really absent.

ORCHESIA CALOTRICHIA, n.sp.

Bright castaneous. Densely clothed with somewhat golden pubescence, conspicuously waved on elytra, and less conspicuously so on pronotum.

Antennae short, five apical joints forming a loosely compacted club. *Prothorax* about thrice as wide as the median length, sides strongly and evenly rounded, base much wider than apex, with a fairly deep impression on base towards each side; marginal carina on each side distinct throughout. *Elytra* dilated for a short distance from base, and then narrowed to apex, each with a feeble longitudinal elevation on basal third at one third from suture. *Under-surface* strongly ridged along middle. Hind spurs about as long as their supporting *tibiae*, and slightly shorter than the following joint. Length, $3\frac{1}{4}$ mm.

Hab.—Queensland: Mount Tambourine, unique (H. Hacker).

Structurally close to *O. austrina*, but with beautifully waved elytral clothing; this causes the elytra (when viewed from behind) to appear transversely multi-fasciate. The punctures are dense and fine throughout, but are slightly more conspicuous on the front of the head than elsewhere.

ORCHESIA WELLINGTONIANA, n.sp.

Black; parts of appendages obscurely diluted with red, spurs to hind *tibiae* somewhat paler. Densely clothed with short, dingy pubescence.

Head almost concealed from above. Apical joints of antennae forming a loose club. *Prothorax* about once and one fourth as wide as the median length, sides feebly rounded from base to middle and then strongly to apex, with a vague depression on each side of base; marginal carina on each side sub-basal. *Elytra* the width of prothorax at base, sides feebly dilated to beyond the middle, and then narrowed to apex. *Under surface* rather strongly ridged along middle. Hind spurs subequal, slightly shorter than their supporting *tibiae*, and distinctly shorter than the following joint. Length, $1\frac{1}{2}$ -2 mm.

Hab.—Tasmania: Summit of Mount Wellington (A. M. Lea).

Allied to *O. minuta*, but without metallic gloss, pubescence distinctly shorter, spurs to hind *tibiae* shorter (although decidedly long), and elytra rather more dilated about the middle. One of the four specimens before me has the pronotum and

apical portion of elytra very obscurely diluted with red. The punctures are dense and rather fine throughout.

ORCHESIA MINIMA, n.sp.

Black with a distinct metallic gloss, parts of appendages obscurely diluted with red. Clothed with very short pubescence. Length, $1\frac{1}{2}$ mm.

Hab.—Tasmania: Mount Wellington; a single specimen from moss (A. M. Lea).

The smallest species of the family known to occur in Australia: in general appearance it is like a very small specimen of *O. minuta*, but with shorter pubescence, and proportions of the elytra and hind tibiae as in *O. wellingtoniana*; from the latter it differs in its smaller size, somewhat metallic lustre, punctures more distinct, and prothorax without subbasal depressions.

TABLE OF SPECIES OF *Orchesia*.

- A. Derm of elytra uniformly coloured or almost so.
- a. Derm more or less blackish.
 - b. Without metallic gloss *wellingtoniana*.
 - bb. With metallic gloss.
 - c. Elytral clothing excessively short (scarcely visible under a Coddington lens) *minima*.
 - cc. Elytral clothing longer than in *c* *minuta*.
 - aa. Derm more or less castaneous*
 - d. Elytral pubescence waved *calotricha*.
 - dd. Elytral pubescence uniformly disposed.
 - e. Length $5\frac{1}{2}$ mm. or more *macleayi*.
 - ee. Length 4 mm. or less *austrina*
- AA. Derm of elytra with conspicuous markings.
- B. Markings rendered very conspicuous by clothing *multinotata*.
 - BB. Markings distinct in themselves.
 - c. Elytra with a wide median flavous patch ... *medioflava*.
 - cc. Elytra with two zig-zag pale fasciae.†
 - f. Pronotum with a depression towards each side *eucalypti*.
 - ff. Pronotum without such depressions *pictipennis*.
 - ccc. Elytra with three zig-zag dark fasciae.
 - d. Pronotum with a large semidouble infusate blotch *bryophila*.
 - DD. Pronotum immaculate *macilenta*.

* On some specimens of *O. austrina* the derm is somewhat blackish, but such specimens are always larger than those of *a*.

† Some specimens of *O. pictipennis* have the markings less conspicuous than on the typical form.

CTENOPLECTRON SERICEUM, n.sp.

Blackish; under surface and appendages of a dingy reddish-castaneous. Densely clothed with extremely short, silken pubescence.

Head rather convex. *Eyes* large, subreniform. *Antennae* moderately long and thin, second joint about half the length of third, the latter slightly shorter than first. *Prothorax* about as long as wide, base lightly bisinuate and near base with three shallow round depressions, hind angles obtuse, front ones strongly rounded off; marginal carina on each side acute from base to slightly beyond the middle, but vanishing before the apical third. *Elytra* long, thin, and parallel-sided to beyond the middle, striation fairly well-defined. Four hind *tibiae* strongly serrated on the upper surface, spurs to hind pair very unequal, the longer about twice the length of the other, and about half the length of the following joint. Length, 8 mm.

Hab.—Tasmania: Ulverstone, unique (A. M. Lea).

With the general appearance of *C. agile*, but elytra more strongly striated, the suture not serrated posteriorly, and the pronotum with the median line absent except for a vague basal depression. The punctures are dense and everywhere very minute, so that they are scarcely to be seen under a Coddington lens.

CERAMBYCIDAE.

CREMYS DIOPHTHALMUS, Pascoe.

A specimen from New South Wales possibly represents a variety of this species; it differs from the description in having the derm of the prothorax entirely black, and the elytra black except for a narrow line on each elytron; this line commences near the side about the middle, is directed obliquely towards the suture, and is then deflected upwards parallel with the suture half-way to the base; the femora and tibiae are dark. In the original description the elytra are noted as having only the apical half black, and with a pale line apparently as on my specimen; the prothorax was also noted as having two black spots. Later, in diagnosing the genus, Pascoe again commented upon two black prothoracic spots. Lacordaire, however, shows* the elytra as having a postmedian fascia and the suture pale

*Atlas, Pl. 93, fig.3.

almost throughout; on my specimen no part of the suture is pale, but on holding it up in certain lights the silken pubescence appears to become fasciate at the summit of the apical slope. Lacordaire's figure also shows that the black prothoracic spots are really two small fascicles of upright setae, as on the specimen before me.

ZOEDIA GRACILIPES v. d. Poll.

Two specimens from Waterfall Gully (near Sydney) appear to belong to this species, but differ from the description and figure in having the legs and prothorax of the same shade of red as the base of the elytra, and the head but little darker.